

ABSTRACT

The present invention relates to the field of nucleic acid sequence analysis. The invention provides methods for performing a polymerase signal assay (PSA) to analyze 5 nucleotide sequences using solid phase sequence arrays comprising a plurality of sequence reagents with primer sequences 4-6 bases in length. The methods of the invention generate a binary signal pattern which can be used to identify nucleic acid sequences and/or mutations and 10 polymorphisms of a nucleic acid sequence. Mutations and polymorphisms which can be identified by the methods of the invention include single nucleotide polymorphisms (SNP's), base deletions, base insertions, and heterozygous as well homozygous polymorphisms.

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